

IN THE CLAIMS:

The claims as pending as follows:

1-8. (Canceled).

9. (Previously Presented) A system for visualizing, from topology data, a multi-layer topology schematic including a plurality of view levels, said system comprising:

visualization control means;

a components connection table in which component-to-component connections included in said multi-layer topology schematics are defined as discrete component-to-component links independent of the view level to which each component belongs; and

partial domain management units prepared for each of a plurality of partial domains defined in said topology schematic,

wherein each of said partial domain management units includes predefined components to be displayed within the partial domain and a view level associated with each component, wherein said components are defined for at least two of said plurality of view levels within the partial domain,

further wherein in response to an input by which a partial domain and a requested view level to which the currently displayed schematic is to change have been selected, said visualization control means sets said requested view level in the partial domain management unit associated with said selected partial domain, and said system displays within said selected partial domain the component belonging to said requested view level as defined in said associated partial domain management unit,

further wherein said visualization control means displays connection lines between a component displayed in response to said input and a component that is currently displayed and had also been displayed before said input on the display screen in accordance with said components connection table,

further wherein said connection lines are defined between components in different partial domains.

10. (Previously Presented) A system for visualizing, from topology data, a multi-layer topology schematic including a plurality of view levels, said system comprising:

visualization control means;

an interlayer relation table in which distinct correspondence of a specific component on a view level to at least one component on another view level is defined; and

partial domain management units prepared for each of a plurality of partial domains defined in said topology schematic,

wherein each of said partial domain management units includes predefined components to be displayed within the partial domain and a view level associated with each component, wherein said components are defined for at least two of said plurality of view levels within the partial domain,

further wherein in response to an input by which a partial domain and a requested view level to which the currently displayed schematic is to change have been selected, said visualization control means sets said requested view level in the partial domain management unit associated with said selected partial domain, and said system displays within said selected partial domain the component belonging to said requested view level as defined in said associated partial domain management unit,

further wherein said distinct correspondence between components is defined between components in different partial domains.

11. (Previously Presented) The system as recited in Claim 9, wherein, when a new component is displayed in place of a previous component based on said input, and said new component and said previous component have a corresponding relationship in said interlayer relation table, said visualization control means displays said new component in a characteristic visual style.
12. (Previously Presented) The system as recited in Claim 9, wherein said characteristic visual style is selected from the group consisting of bold, a contrasting color, a different line thickness, a different line type, a different background color, a different background texture, blinking content, or a combination thereof.

13-17. (Canceled).

18. (Previously Presented) A method for visualizing, from topology data, a multi-layer topology schematic including a plurality of view levels, said method to be used on a terminal device connected to a server via a network, said method comprising the steps of:

receiving multi-layer topology data wherein components or component-to-component connections may be different for each of said view levels;
creating a partial domain view level table in which components to be displayed within each level of the partial domain and the view levels of the components are defined for all partial domains set in accordance with the arrangement of components in the topology schematic;

displaying on the screen of the terminal an initial topology schematic on an initial view level in accordance with said multi-layer topology data; and
in response to user input by which a partial domain and a requested view level to which the currently displayed schematic is to change have been selected, determining which component(s) belong to said requested view level from the partial domain view level table for the selected partial domain and changing the display of said selected partial domain to that of the determined component(s),

wherein said terminal device creates an interlayer relation table in which distinct correspondence of a specific component on a view level to at least one component on another view level is defined, according to the multi-layer topology data received from said server,

further wherein said distinct correspondence between components is defined between components in different partial domains.

19. (Previously Presented) A computer-executable program, embodied in a computer-readable medium, for performing a visualization process comprising the steps of:

the step of generating a plurality of view instances, each in which the identifier of a component, coordinates where the component is to be displayed on the schematic, and the component symbol figure are defined from given topology definition data;

the step of generating partial domain instances for all partial domains set in topology schematic space from said topology definition data, each domain instance controlling the components to be displayed in the domain per view level;

the step of generating a connection table in which component-to-component connections are defined from said topology definition data;

the step of identifying initial components for a predefined initial level specified by referring to said partial domain instances and displaying the symbol figures of the components on the display screen in accordance with the definitions of the view instances corresponding to the identified components; and

the step of displaying connection lines between the displayed components in accordance with said connection table,

further wherein said connection lines are defined between components in different partial domains.

20. (Previously Presented) The program according to claim 19, further comprising the step of:

in response to an external input identifying a selected partial domain and a requested view level to which the current view layer is to change, identifying component(s) by referring to the partial domain instance for said selected partial domain and displaying the symbol figure(s) of the component(s) in accordance with the definition(s) of the view instance(s) for the identified component(s).